

### Remarks

Claims 9 through 12 are in prosecution. All claims are rejected under 102(b) as anticipated by Ogawa (US 5,608,874). Claims 9 and 12 are rejected as anticipated by McLaughlin (US 6,421,570). Claims 10 and 11 are rejected as obvious under McLaughlin in view of Ogawa. Claim 9 is amended to address the rejections. Specifically, the present amendment adds to claim 9 the language that all publication points of a specific broker such as 32 in Fig. 3 relate to different formats of the same topic. The claims have never quite captured that aspect of the invention before, and is in fact quite central to the invention. Claim 9 should now clearly distinguish over the prior art. All other claims depend from claim 9.

Claim 9 is amended to delete the word "unique" to remove the 112 second paragraph problem pointed out by the Examiner.

Claim 9 is also amended to delete the language "a different publication point data processing node being selected on different occasions" in response to the specification objection under rule 75(d) (1).

Turning now to the prior art rejections, claim 9 has now been amended in order to more clearly point out the inventive features of the present invention and to more clearly distinguish over the applied prior art. A short

summary of the invention, as is reflected in the amended claim 9, will now be given.

The invention is specifically concerned with a publish/subscribe message broker, such as 32, as shown in Fig. 3, where a publisher application 31a can select amongst a plurality of publication points (323, 324), where each of the publication points is dedicated to a particular topic (e.g., the topic of IBM stock is given in the specification). The broker works according to a topic architecture where a publisher application specifies a topic to the broker when a message is published to the broker and the broker then looks up which subscriber applications have previously registered subscription requests to that topic; the message is then forwarded to such subscriber applications. This way, the publisher does not need to have any knowledge of the subscriber applications and vice versa. The broker takes care of this, by the topic concept just described. In the admitted prior art, to get a particular message to a plurality of subscribers in different formats, it is necessary to use different topics, one topic for each format (e.g., one topic would be "IBM stock price in US dollars", the other topic would be "IBM stock price in British pounds"). This duplication of topic names increases the administrative burden on the broker system.

The invention improves over the admitted prior art by allowing a single topic to be used for all formats of that topic. A publisher specifies which of the plurality of

publication points the broker should use to publish the message. By so specifying the publication point, the publisher also specifies the format, because a unique series of format transformation nodes follows each publication point, except for perhaps one publication point. This way, a message can be delivered via the broker to different subscribers in the appropriate formats for each subscriber, even though the same topic is used for all formats.

As for the first prior art rejection of claim 9, based on Ogawa, due to the many claim amendments that Applicant has made to claim 9, Ogawa should no longer be considered relevant. Ogawa teaches a system that takes data from a wide variety of remote sources and identifies the format of the data and translates the data into a common format and then translates it into the format needed by the particular recipient. This is not the same as the very specifically recited architecture of claim 9 of the present invention that uses a single topic, corresponding to a plurality of publication points. The publisher in Ogawa does not select one publication point of a plurality of such publication points which are all dedicated to the same topic, with the selection being made based upon the type of format required for the delivered message. Instead, in Ogawa, the publisher simply sends the data to the system, which then identifies the format and translates it. If the Examiner decides to maintain the rejection based on Ogawa, despite the many claim amendments that are now made to claim 9, the Examiner is respectfully requested to clearly match each

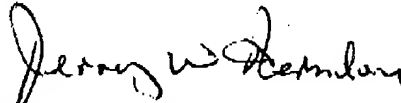
portion of claim 9 to the corresponding portion of Ogawa, explicitly separating out the newly added features to claim 9 and showing where such newly added features to claim 9 are specifically taught by Ogawa.

As for the second prior art rejection of claim 9, based on McLaughlin, claim 9 should now make it very clear that McLaughlin is very different. As Applicant has discussed at length in previous responses, McLaughlin is drawn to a completely different architecture where the publishers and subscribers need to know information about each other. McLaughlin does not use the concept of topics, which allows for the anonymity of publishers to subscribers and vice versa. Claim 9 now clearly recites these concepts as discussed above, and the appropriate language has been added in the body of the claim, not the preamble (in the last office action, the Examiner had commented that relevant claim language was not given patentable weight because it was in the preamble not the body). Again, if Examiner decides to maintain the rejection based on McLaughlin, despite the many claim amendments that are now made to claim 9, the Examiner is respectfully requested to clearly match each portion of claim 9 to the corresponding portion of McLaughlin, with particular emphasis placed on the newly added features to claim 9. Claim 9 is also amended to recite that the broker is a separate entity from the publisher and subscriber applications, in response to the Examiner's comment that claim 9 as it previously existed did not recite this.

Accordingly, it is respectfully submitted that the amended claim 9 is now patentably distinct from the prior art of record. All of the Examiner's comments in response to Applicant's previous remarks have been taken into account in order to remove the chance of any possible interpretation of claim 9 which could arguably read onto the prior art.

Applicant believes that patentable novelty is demonstrated by the above arguments and amendments and that the claims are in condition for allowance. Accordingly, Examiner is requested to reconsider this case and pass it to issue.

Respectfully Submitted,



Jerry W. Herndon  
Attorney Representing Applicant  
Reg. No. 27,901

IBM Corporation  
Intellectual Property Law  
Department T81/Building 503  
P.O. Box 12195  
Research Triangle Park, NC 27709

(919) 543-3754  
FAX: 919-254-4330  
Email: herndonj@us.ibm.com